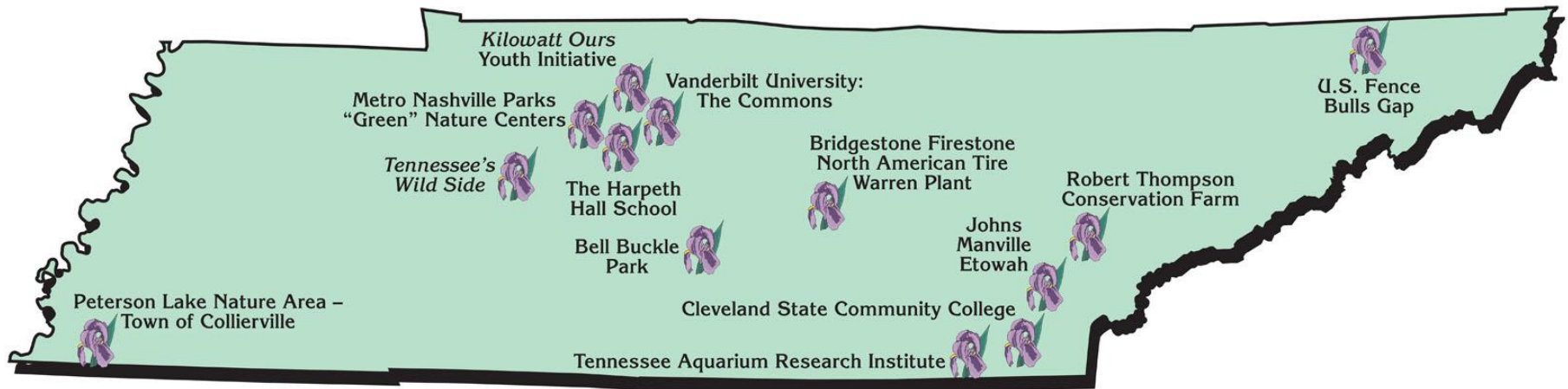




# Governor's Environmental Stewardship Awards

# 2008 Governor's Environmental Stewardship Award Winners





## ***About the Awards***

Each year, the Tennessee Department of Environment and Conservation recognizes many voluntary efforts of individuals, organizations, local governments, and companies that enhance our environment and natural resources. The winners of the Governor's Environmental Stewardship Awards represent the very best achievements in Tennessee.





# ***Excellence in Agriculture/Forestry Stewardship***

*Robert Thompson Conservation Farm  
Niota*





LANE VIEW FARMS

957  
HOWELL & GENEVA

THOMPSON & SONS



**Before**



**Oostanaula  
Creek  
2007**



**2008**



**After**





# Rotational Grazing Technology







**Malone Springs and  
Springhouse**





**Water Tanks**





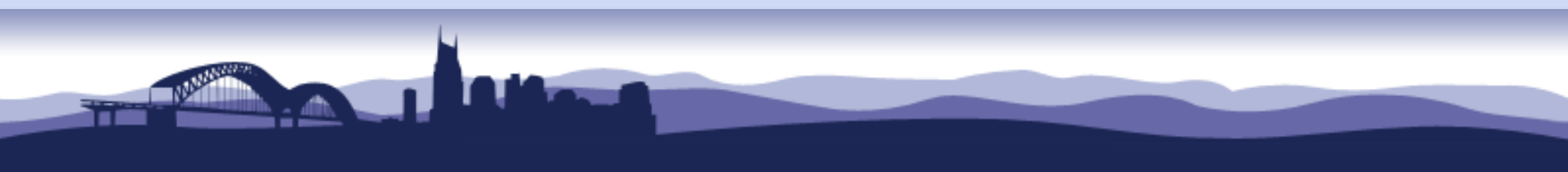
# Robert Thompson and Will Thompson at a stream crossing excluding cattle



# ***Excellence in Agriculture/Forestry Stewardship***



(l-r) Deputy Commissioner Paul Sloan, Robert Thompson; Owner, Lori Munkeboe; Director of the Office of Environmental Assistance





# ***Excellence in Agriculture/Forestry Stewardship***

*Robert Thompson Conservation Farm  
Niota*







# Governor's Environmental Stewardship Awards



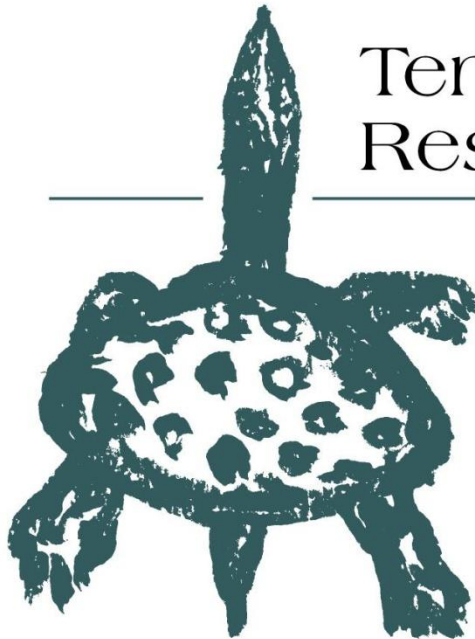
# ***Excellence in Aquatic Resource Preservation***

*Tennessee Aquarium Research Institute*





TENNESSEE  
AQUARIUM



Tennessee Aquarium  
Research Institute



















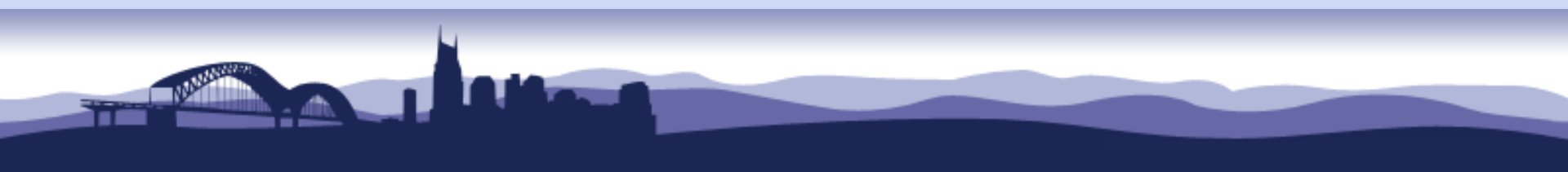




# ***Excellence in Aquatic Resource Preservation***



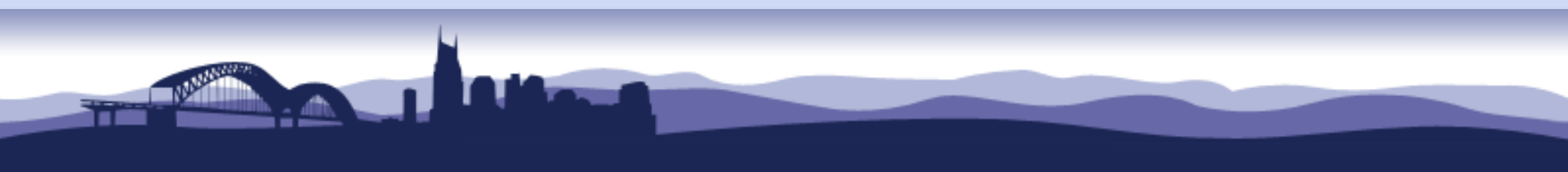
(l-r) Deputy Commissioner Paul Sloan, Dr. Anna George; Director of the Tennessee Aquarium Research Institute, Lori Munkeboe; Director of the Office of Environmental Assistance





# ***Excellence in Aquatic Resource Preservation***

*Tennessee Aquarium Research Institute*







# Governor's Environmental Stewardship Awards



# ***Excellence in Building Green***

*Metro Nashville Parks  
“Green” Nature Centers*







**Shelby Bottoms  
Nature Center**



# Beaman Park Nature Center







# Bells Bend Outdoor Center





**Compact Fluorescent  
Fixtures, Ceiling Fans,  
Natural Daylighting  
and Operable  
Windows**

**Green Roof**







**Geothermal system for heating and cooling. Three 300 foot wells were dug and pipes installed which will use the earth's constant temperature to save energy.**





**Logs collected from the site were used to build a mantle, furniture, bowls and other items for the nature center**





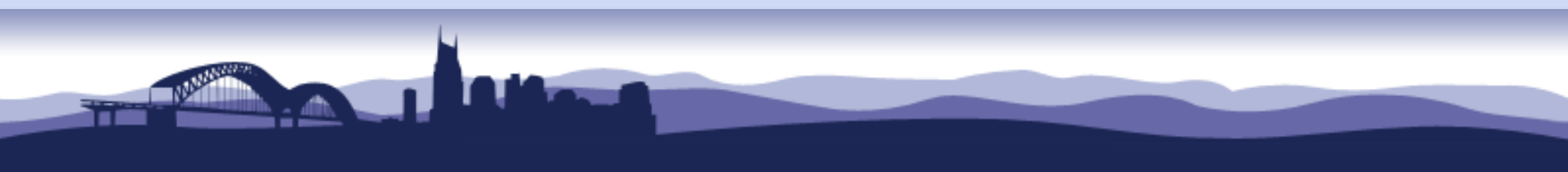


**The buildings themselves are part of the educational exhibit for visitors at each center**

# ***Excellence in Building Green***



(l-r) Gwen Griffith; Director of the BOB Program with the Cumberland River Compact, Sandy Bivens; Superintendent of Nature Centers, Tim Netsch; Superintendent of Planning, Nancy Dorman; President of Friends of Beaman Park, Deputy Commissioner Paul Sloan; TDEC, Denise Weyer; Director of the Shelby Bottoms Nature Center, Vera Vollbrecht; Director of the Warner Park Nature Center, LinnAnn Welch; Director of the Bells Bend Nature Center, Bob Parrish; Superintendent - Natural Resource Management, Lori Munkeboe; Director of the Office of Environmental Assistance

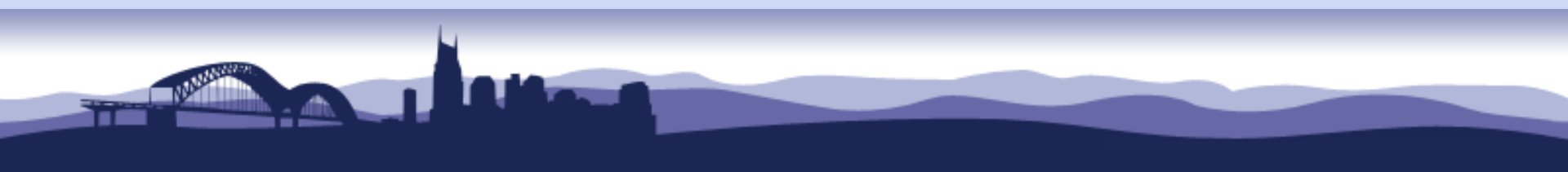






# ***Excellence in Building Green***

*Metro Nashville Parks  
“Green” Nature Centers*





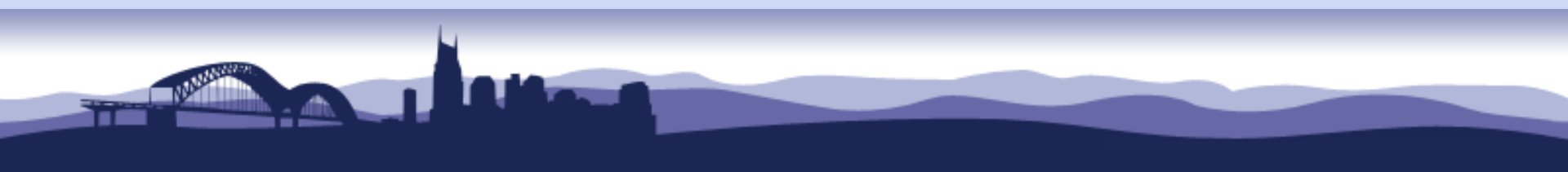
# Governor's Environmental Stewardship Awards





# ***Excellence in Energy Leadership***

*Cleveland State Community College*







# Cleveland State Community College

## Moving Towards Zero Energy Homes in the Tennessee Valley

### High School Program

- Introduce Zero Energy Objectives
- Construction Materials
- PV Panel Installation
- Solar Water Heating Installations
- Prepare Students for CSCC Programs

### Construction Technology Program

- 1 Year Certificate Program
- 2 Year Degree Program
- Scholarships for One Year Program
- Groundwork for PV Installation Certification

### Architectural

- Drawing
- Commercial Planning

### Engineering

- Computer Aided Design

### Construction

- Techniques and Methods
- Cost Estimating
- Standard Building Codes
- Renewable Energy
- PV Panel Installation
- Energy Efficient Construction
- Contracting

*Cleveland State is offering a community based job training program through a grant from the U.S. Department of Labor to promote energy efficient residential construction technologies and practices.*



*Cleveland State is partnering with Habitat for Humanity to provide opportunities for hands-on experience with many construction materials and methods.*

Habitat for Humanity®



### Industrial Technology

- Measurements & Calculations
- Introduction to Technology

### Other

- English Composition
- Math
- Physics
- Public Speaking
- Humanities & Social Science Electives

A Cleveland State Technology Department Program.

*Celebrating our past • Planning for your future*  
**40th**  
Anniversary  
1967-2007







# First HERS Class





# 8<sup>th</sup> Grade Career Fair



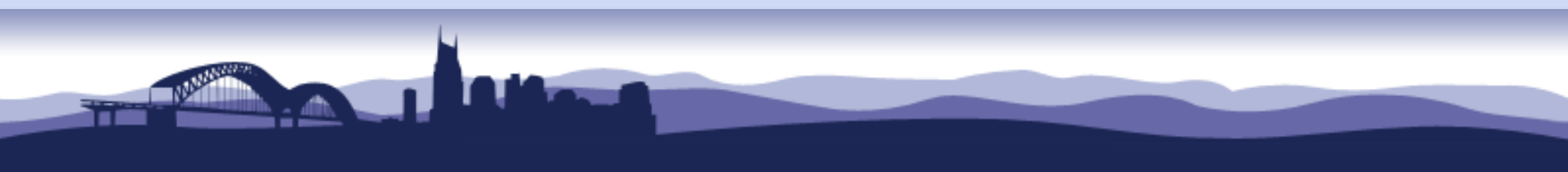




# ***Excellence in Energy Leadership***



(l-r) Dr. Frank McKenzie; Dean of Business and Technology Department; Deputy Commissioner Paul Sloan, Allan Gentry; Technology Department Chair and Program Administrator, Bob Lantz; Technology Associate Professor-Retired, Program Originator, Dr. Carl Hite; College President, Lori Munkeboe; Director of the Office of Environmental Assistance







# ***Excellence in Energy Leadership***

*Cleveland State Community College*





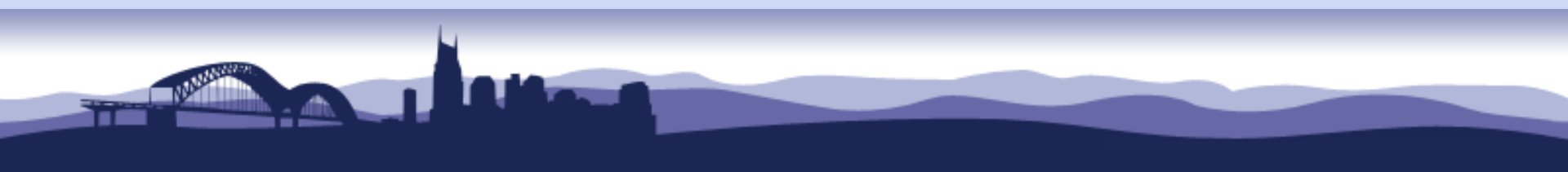
# Governor's Environmental Stewardship Awards



# ***Excellence in Environmental Education and Outreach***



*Kilowatt Ours  
Youth Initiative*

















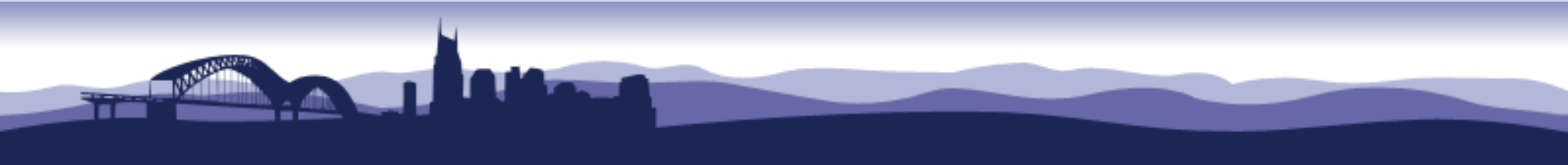




# ***Excellence in Environmental Education and Outreach***



(l-r) Deputy Commissioner Paul Sloan, Jennifer Barrie; Youth Initiative Director,  
Kilowatt Ours, Lori Munkeboe;  
Director of the Office of Environmental Assistance

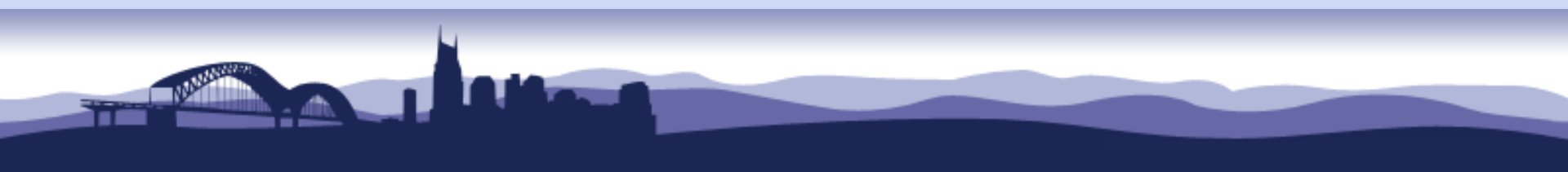




# ***Excellence in Environmental Education and Outreach***



*Kilowatt Ours  
Youth Initiative*





# Governor's Environmental Stewardship Awards

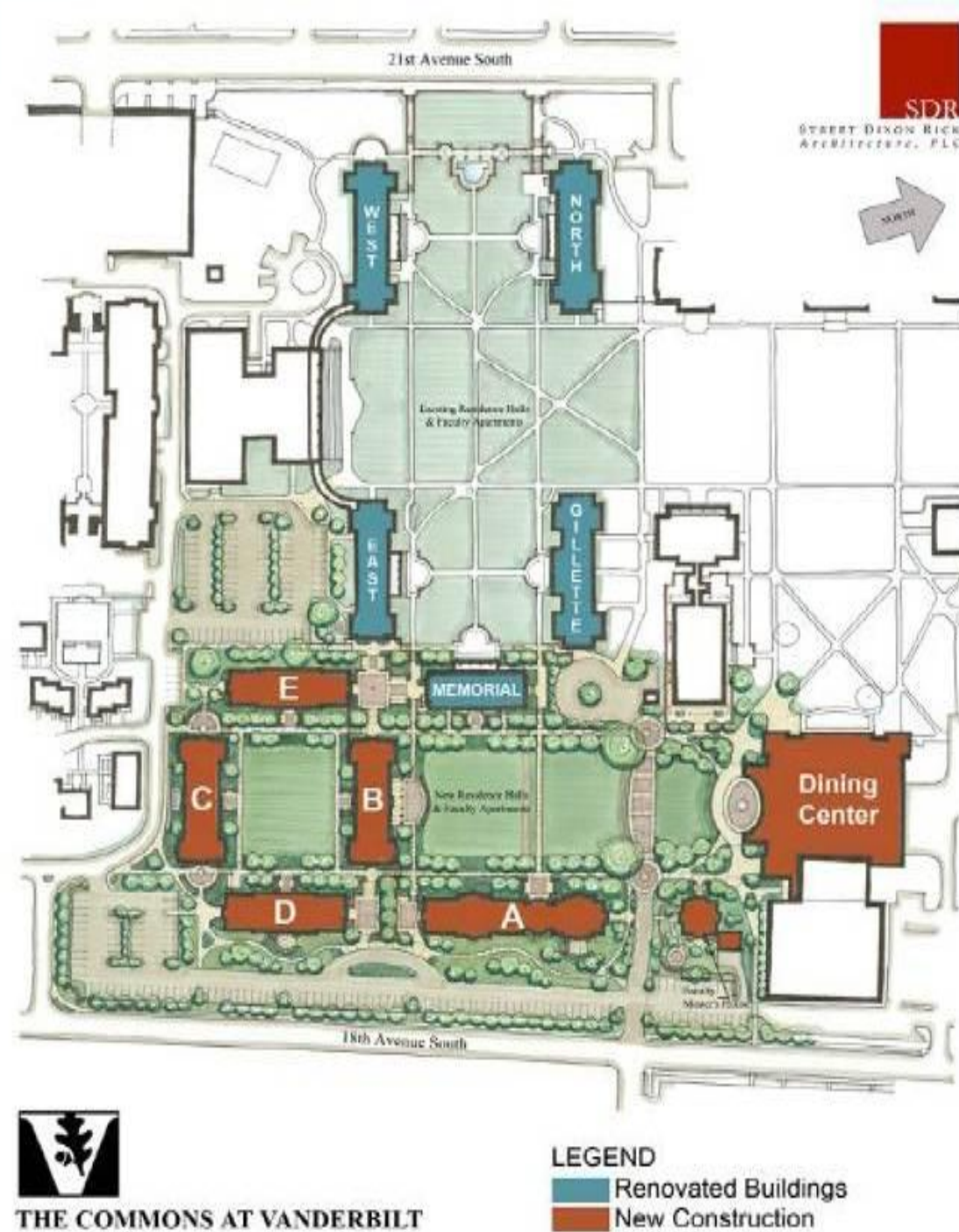




# ***Green Schools: Higher Education***

*Vanderbilt University  
The Commons*





## The Commons Site

- 5 new residence houses
- 5 renovated residence houses
- Commons Center
- New utility infrastructure and chiller plant





**65% to 70% of  
demolition and  
construction  
waste was  
recycled,  
diverting waste  
from the landfill**

**Waterless Urinals  
saves up to 40,000  
gallons of water in  
a single year**





**Compost  
Demonstration Site, a  
student led initiative  
that collects kitchen  
scraps and composts  
them to nourish  
campus planting beds.**

**Dining Services is  
using all hard china  
and silverware to  
reduce to-go  
packaging.**







**Recycled Content in  
Materials:  
Drywall-94% post industrial  
& 5% post consumer  
Steel-95% recycled content  
Carpet - recycled content**

**Final rinse water  
is reused for the  
dirty dish wash**



**Daylight Harvesting  
uses a lighting  
control system with  
sensors that turn off  
light fixtures when  
there is enough  
daylight in the  
building.**



**Dual Flush Toilets  
provide options for  
more or less water  
per flush.**



**Low-flow faucets  
reduce water used  
and automatic  
sensors cut water off  
shortly after use.**

# ***Green Schools: Higher Education***



(l-r) Deputy Commissioner Paul Sloan, Dr. Frank Wcislo; Dean of the Commons at Vanderbilt, Lori Munkeboe; Director of the Office of Environmental Assistance







# ***Green Schools: Higher Education***

*Vanderbilt University  
The Commons*





# Governor's Environmental Stewardship Awards

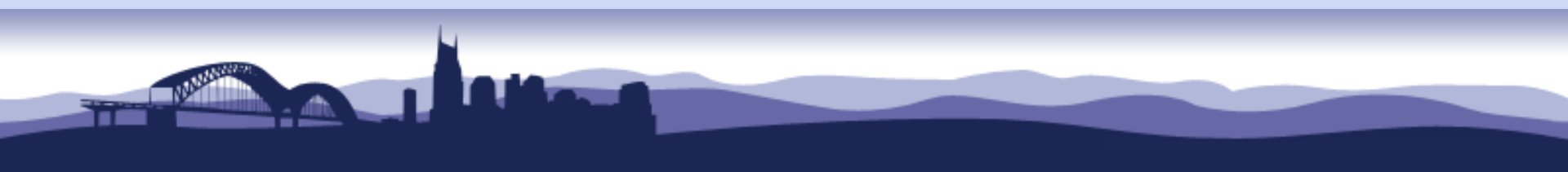




# ***Green Schools: K-12***

---

*The Harpeth Hall School*



# The Harpeth Hall School







# Upper School and Middle School Green Teams







**The Harpeth Hall School was certified as an arboretum by the Tennessee Urban Forestry Council.**



# Green Awareness Week



**Walking and  
Biking to  
school**









# ***Green Schools: K-12***



(l-r) Deputy Commissioner Paul Sloan, Anne King; Director of Finance and Operations, Lori Munkeboe; Director of the Office of Environmental Assistance

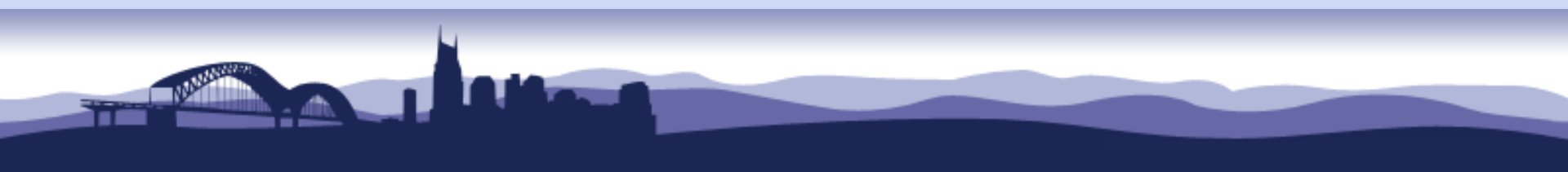






# ***Green Schools: K-12***

*The Harpeth Hall School*





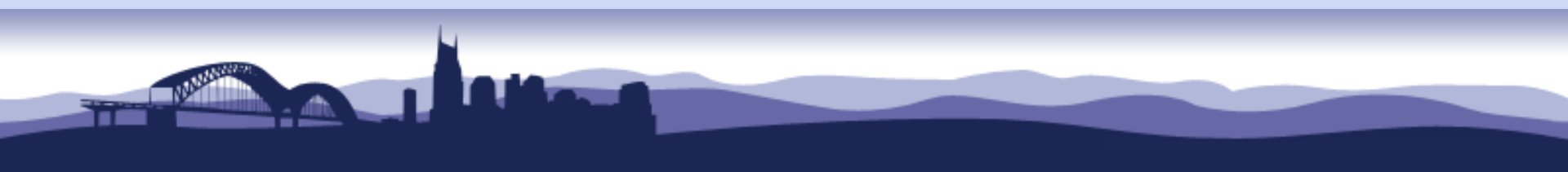
# Governor's Environmental Stewardship Awards





# ***Excellence in Greenways and Trails***

*Peterson Lake Nature Area  
Town of Collierville*





**The Peterson Lake Nature Boardwalk offers protection to waterways and reduces the fragmentation of wildlife habitats**






**The boardwalk includes an overlook of the Wolf River (approximately 12,000 yrs old)**







**The boardwalk  
provides the means to  
maintain a natural  
environment in areas  
affected by urban  
development**



**The boardwalk offers its users an opportunity to enjoy linear recreation components in its most natural settings.**





**The boardwalk was designed to minimize impact to the site in order to not disturb as few trees, wildlife habitat, and existing wetlands as possible.**





**This pedestrian bridge crosses over  
substantial water slough**

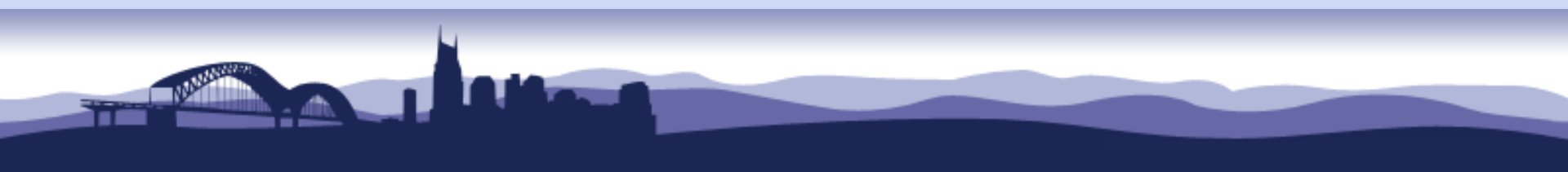




# ***Excellence in Greenways and Trails***



(l-r) Deputy Commissioner Paul Sloan, Vice Mayor Mauren Fraser for the Town of Collierville, Greg Clark; Director – Collierville Parks, Recreation, & Cultural Arts, Lori Munkeboe; Director of the Office of Environmental Assistance, Bob Richards; Greenways and Trails Coordinator, TDEC

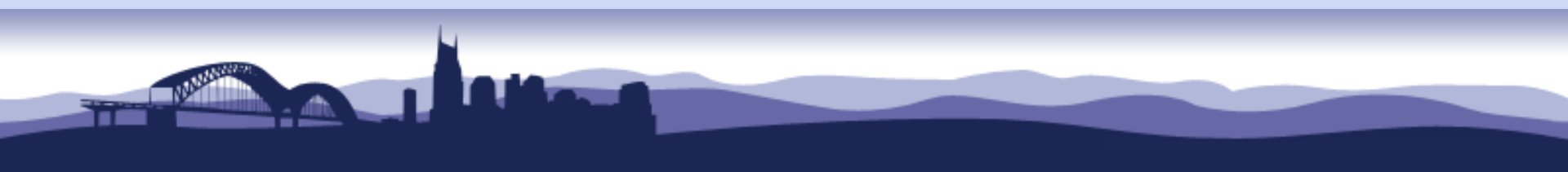






# ***Excellence in Greenways and Trails***

*Peterson Lake Nature Area  
Town of Collierville*





# Governor's Environmental Stewardship Awards



# ***Excellence in Hazardous Waste Reduction***



*Johns Manville  
Etowah*











**Melter Abatement System**





**Mat  
Machine  
Dust  
Abatement**

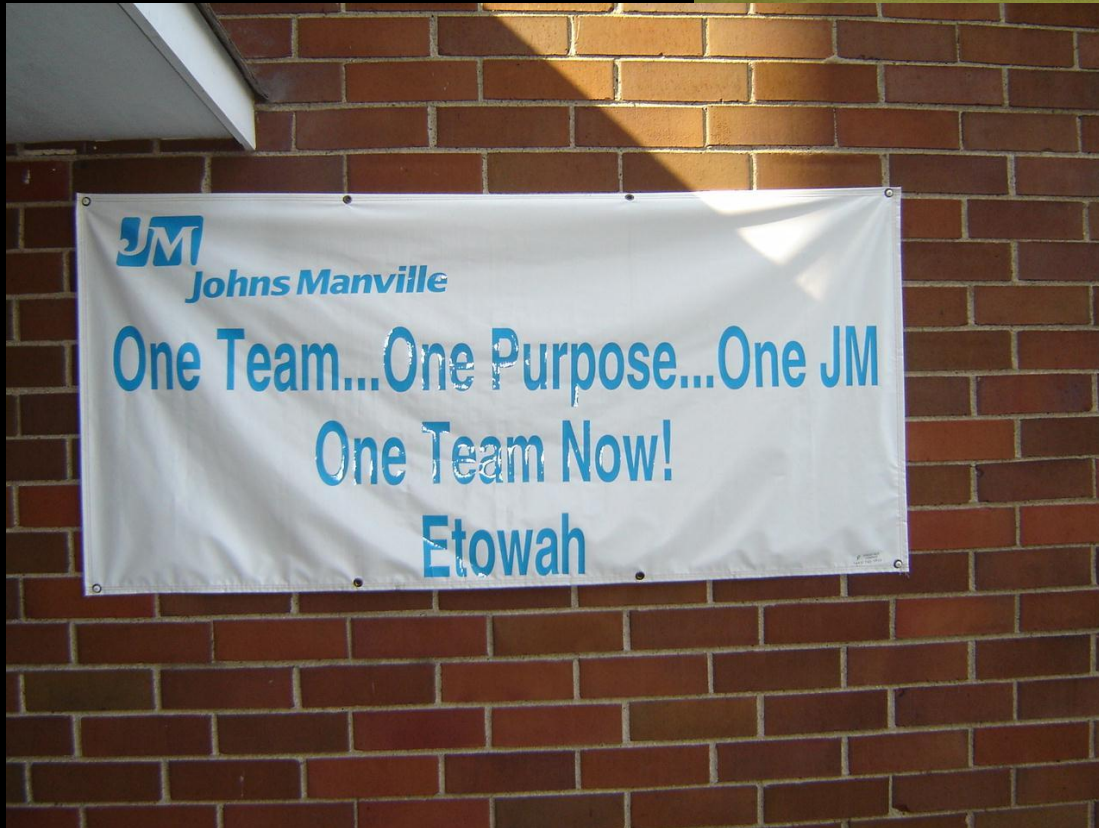


**Metal  
Recycling** ←

**Glass Recycling** →



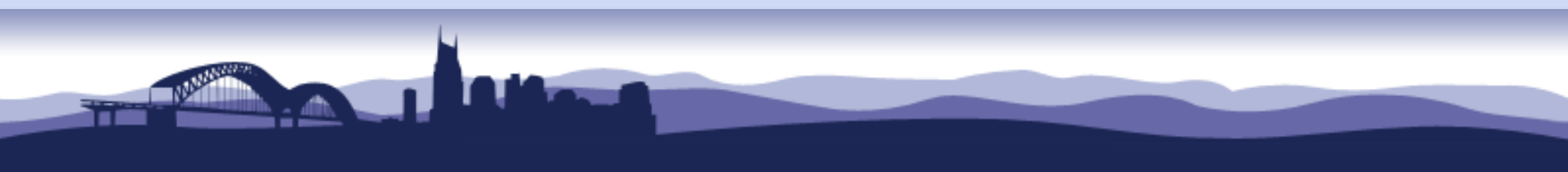




# ***Excellence in Hazardous Waste Reduction***



(l-r) Deputy Commissioner Paul Sloan, Eusebio Roman; Etowah Plant Manager, Lori Munkeboe; Director of the Office of Environmental Assistance





# ***Excellence in Hazardous Waste Reduction***



*Johns Manville  
Etowah*





# Governor's Environmental Stewardship Awards





# ***Excellence in Natural Heritage Conservation***

*Tennessee's Wild Side*



# Whooping Cranes



# Gray Bats





**Painted Snake  
Coiled Forest  
Snail**

**Native Chestnut  
Trees**





**Hellbender  
Salamander**







**Box  
Turtle**

**Bog  
Turtle**





**Burrowing  
Crayfish**

**Eggert's  
Sunflower**







## **West TN Hummingbirds**

## **Tennessee Turkey**



# ***Excellence in Natural Heritage Conservation***



(l-r) Deputy Commissioner Paul Sloan, Alan Griggs; Producer and Wild Side Guide, Lori Munkeboe; Director of the Office of Environmental Assistance







# ***Excellence in Natural Heritage Conservation***

*Tennessee's Wild Side*





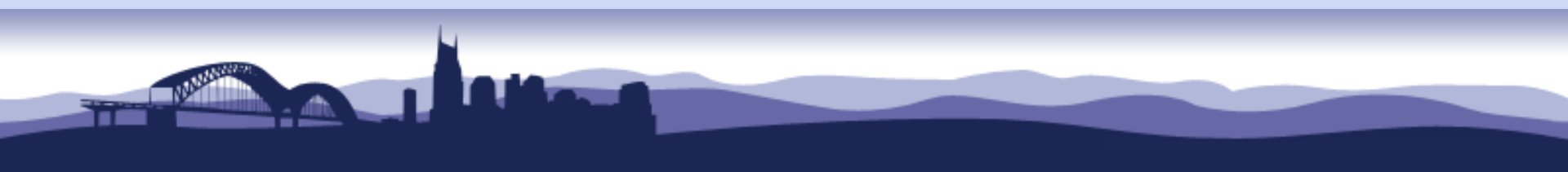
# Governor's Environmental Stewardship Awards





# ***Excellence in Parks and Recreation***

*Bell Buckle Park  
Town of Bell Buckle*



# Before





# Before



# Before





# After



# After





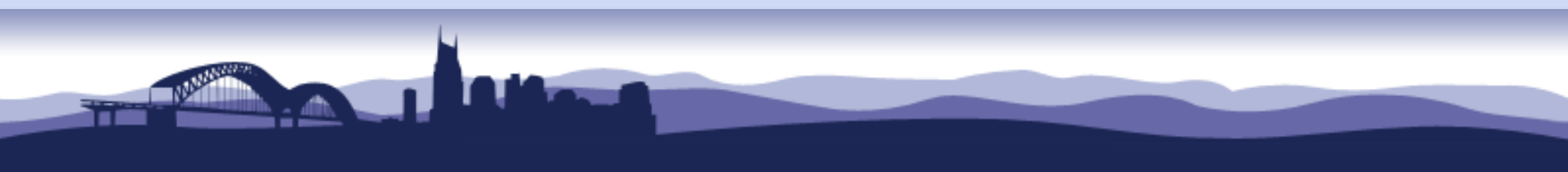
# After



# ***Excellence in Parks and Recreation***



(l-r) Deputy Commissioner Paul Sloan, Bell Buckle Mayor Dennis Webb, Bell Buckle Park Chairman Jenny Hunt, Bell Buckle Park Board member Florence Hall, Bell Buckle Park Board member Larry Lowman, Lori Munkeboe; Director of the Office of Environmental Assistance







# ***Excellence in Parks and Recreation***

*Bell Buckle Park  
Town of Bell Buckle*





# Governor's Environmental Stewardship Awards





# ***Excellence in Pollution Prevention***

*Bridgestone Firestone  
North American Tire  
Warren Plant*





**WARREN PLANT**

**MORRISON, TN**







- **30 Automatic Guided Vehicles converted from Ni-Cad to Hydrogen Fuel Cells**
- **3.6 MMKWH/yr savings**
- **Eliminates cadmium battery packs**



# Hydrogen Fuel Dispensing



**3,400 fixtures  
changed out, saving  
roughly 3,000 tons  
of CO<sub>2</sub> and  
\$270,000 per year  
in electricity**







**Governor Bredeesen presents TP3 Performer Flag and Volunteer STAR award to Warren Plant in 2006**

**While the “touch-less” features of the Green Restroom save in water, paper towel and soap usage.**



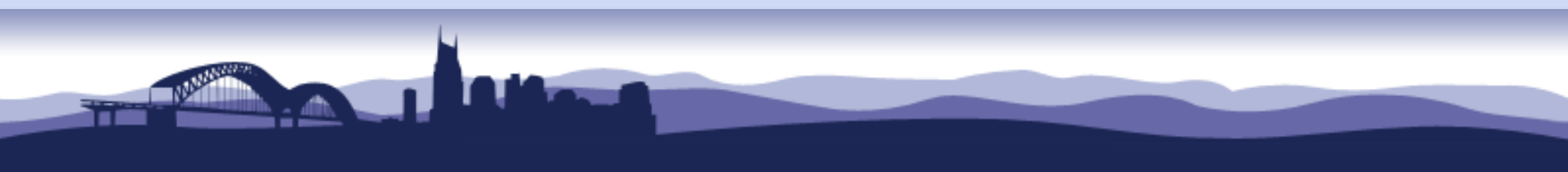




# ***Excellence in Pollution Prevention***



(l-r) Deputy Commissioner Paul Sloan, Sean Fisher; Environmental Manager, Ron Brooks; Plant Manager, Muneer Chowdhury; Facilities Manager, Vern Duncan; Plant Engineer, Lori Munkeboe; Director of the Office of Environmental Assistance







# ***Excellence in Pollution Prevention***

*Bridgestone Firestone  
North American Tire  
Warren Plant*





# Governor's Environmental Stewardship Awards





# ***Excellence in Solid Waste Reduction***

*U.S. Fence  
Bulls Gap*









## Identified Opportunities





**Resolved  
Problems**





# BANDING WOOD CARDBOARD



24 4:15PM







**U.S. Fence has reduced the amount of SOLID WASTE dumped in landfills by 104,318 Cu/Yds Annually!**



# ***Excellence in Solid Waste Reduction***



(l-r) Deputy Commissioner Paul Sloan, Michael Jarnigan; Environmental Health & Safety Manager, Jayme Whittemore; Inventory Control Lead, Jeremy Golden; Production Manager, Matt Urnick; Accounting Clerk, Dean Duva; Health, Safety & Environmental Coordinator, Wayne Lucas; Purchasing Specialist, James Carico; Commodities Buyer, Lori Munkeboe; Director of the Office of Environmental Assistance







# ***Excellence in Solid Waste Reduction***

*U.S. Fence  
Bulls Gap*





# Governor's Environmental Stewardship Awards



# ***Commissioner's Exceptional Partner Award***



*Jimmy Palmer,  
Regional Administrator  
U.S. EPA Region 4*





**Tennessee's School Chemical Cleanout Campaign receives EPA National Notable Achievement Award**





**TDEC receives EPA National Leadership Award for establishing 384 high-quality TMDLs for 2006.**



**Palmer brings EPA Administrator Steve Johnson to town to meet with 2007 Governor's Award Green Building winners at their Morgan Park Place location**





**TDOT and Southeast Diesel Collaborative  
receive EPA National Leadership Award**

# ***Commissioner's Exceptional Partner Award***



*Jimmy Palmer,  
Regional Administrator  
U.S. EPA Region 4*

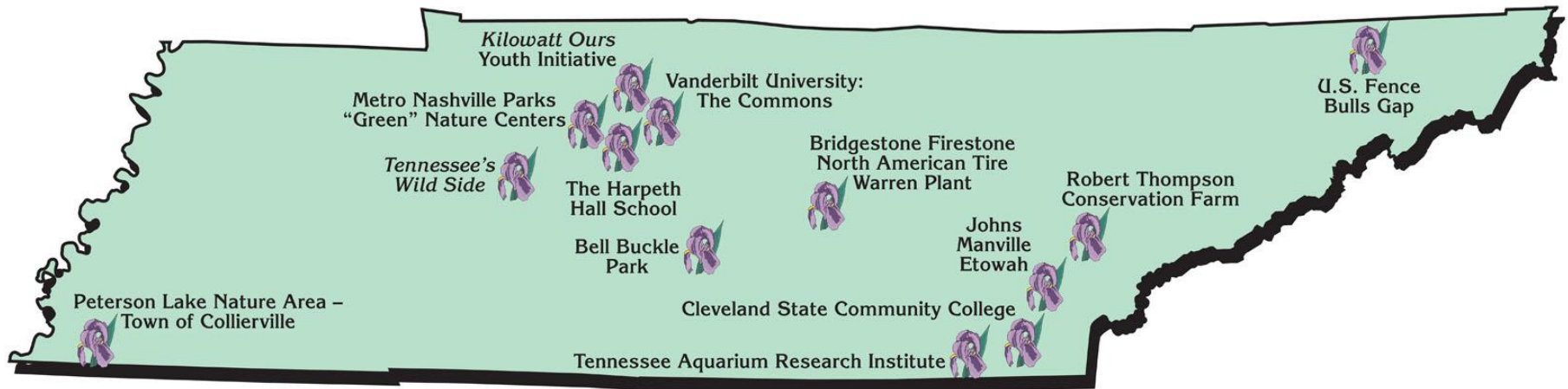






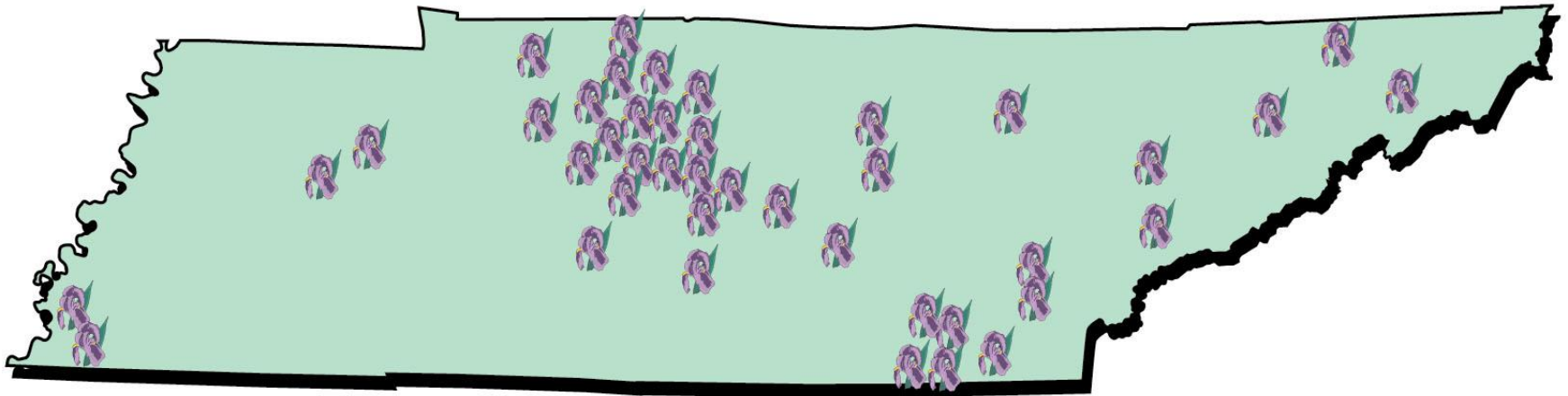
# Governor's Environmental Stewardship Awards

# 2008 Governor's Environmental Stewardship Award Winners





# Community of Governor's Award Winners



## 2006 Governor's Environmental Stewardship Award Winners

Agriculture/Forestry  
 Univ. of Tennessee's Horneyhead Creek Restoration  
 Aquatic Resource Preservation  
 Red River Watershed Association  
 Building Green  
 Cumberland River Compact's BOB project  
 Energy Leadership  
 Panther Creek State Park  
 Environmental Education and Outreach  
 Great Smoky Mountains Institute at Tremont  
 Green Schools: K-12  
 Huntingdon Primary School  
 Green Schools: Higher Education  
 Rhodes College Bike Program  
 Greenways and Trails  
 Tennessee Central Heritage Trail  
 Hazardous Waste Management – Large  
 Fort Campbell's Pollution Prevention Operation Center  
 Hazardous Waste Management – Small  
 Hamilton Co. Schools Chemical Cleanout Campaign  
 Natural Heritage Conservation  
 Stones River National Battlefield Restoration  
 Parks and Recreation  
 Burgess Falls State Park Native Butterfly Garden  
 Pollution Prevention  
 Vanderbilt University's Workplace Commuters Project  
 Robert Sparks Walker Lifetime Achievement Award  
 Happy Birdsong

## 2007 Governor's Environmental Stewardship Award Winners

Agriculture/Forestry  
 Raymond Cooper Farm in Cannon County  
 Aquatic Resource Preservation  
 Sevenmile Creek – Ellington Campus Restoration Project  
 Building Green  
 Morgan Park Place, Phase One  
 Energy Leadership  
 Johnson City Iris Glen Gas to Energy Partnership  
 Environmental and Education Outreach  
 Tennessee Valley Earth Partnership EarthFest  
 Green Schools: K-12  
 West Carroll Elementary  
 Green Schools: Higher Education  
 Middle Tennessee State University WaterWorks!  
 Greenways and Trails  
 Maury County Parks & Recreation Tony's Trail  
 Hazardous Waste Reduction  
 Pull-A-Part Nashville  
 Natural Heritage  
 Friends of Beaman Park  
 Parks and Recreation  
 City of Chattanooga Renaissance Park  
 Pollution Prevention  
 Tricycle, Inc. in Chattanooga  
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 Bertha Chrietberg

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 Johns Manville Facility in Etowah  
 Natural Heritage  
 Tennessee's Wild Side  
 Parks and Recreation  
 Bell Buckle Community Park  
 Pollution Prevention  
 Bridgestone Firestone North American Tire Warren Plant  
 Solid Waste Reduction  
 U.S. Fence Facility in Bulls Gap  
 Robert Sparks Walker Lifetime Achievement Award  
 ?



# ***Robert Sparks Walker Lifetime Achievement Award***

---

*John H. Noel III*



















## **Earth Day 2005**

## **Governor's Task Force on Energy Policy**







**Photos Courtesy of:  
Byron Jorjorian**





**John Noel State Natural Area at Bon Aqua**





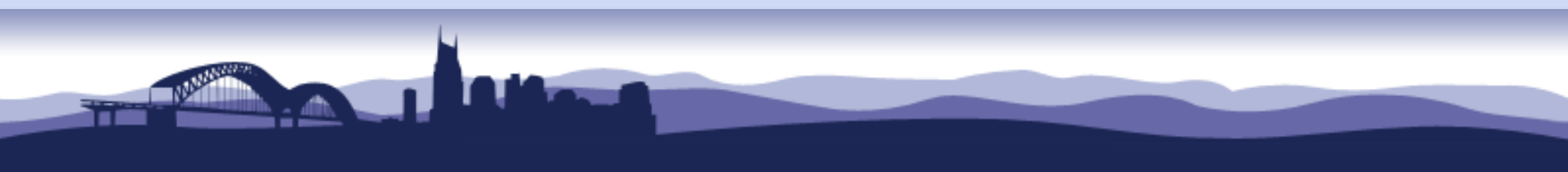




# ***Robert Sparks Walker Lifetime Achievement Award***



(l-r) Deputy Commissioner Paul Sloan, John H. Noel III, Lori Munkeboe;  
Director of the Office of Environmental Assistance







# ***Robert Sparks Walker Lifetime Achievement Award***

---

*John H. Noel III*





# Governor's Environmental Stewardship Awards





***The Tennessee Department of  
Environment and Conservation thanks:***

**Ellington Agricultural Center**

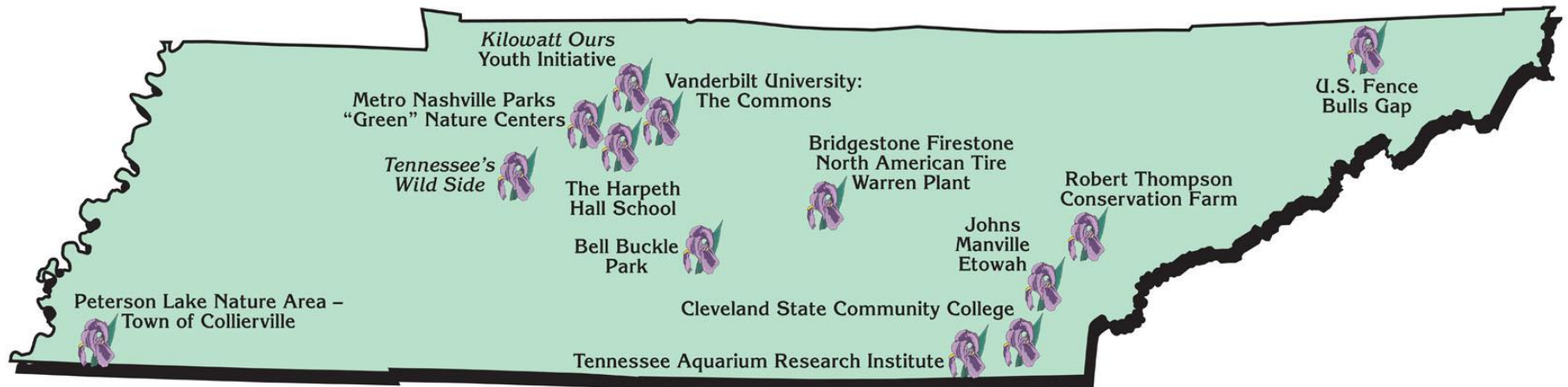
**Montgomery Bell State Park**

***The Tennessee Conservationist***

**Bobby Fulcher and Brian Vollmer**



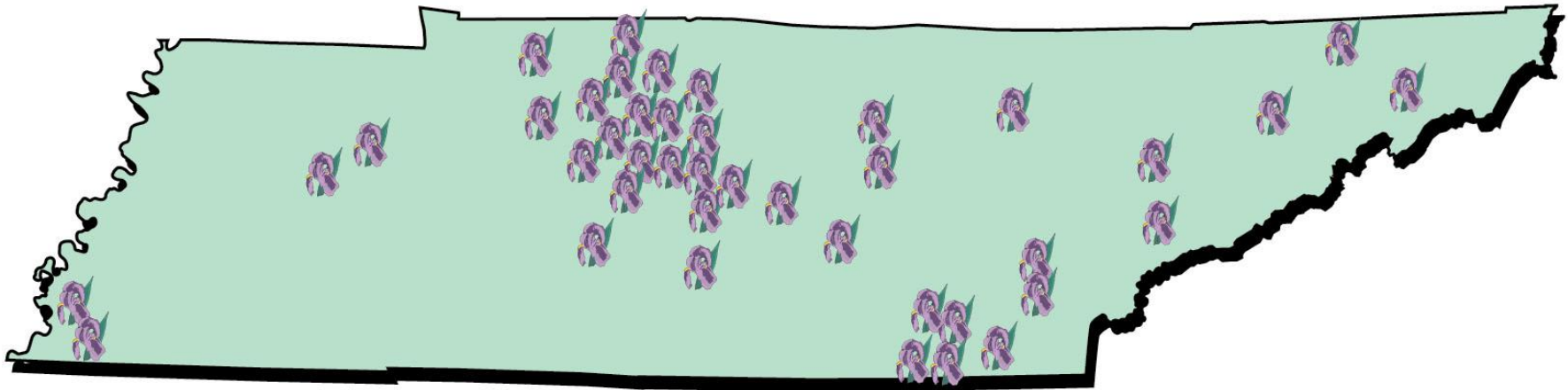
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Robert Sparks Walker Lifetime Achievement Award: John H. Noel III



# Community of Governor's Award Winners



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